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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/087,301	02/27/2002	William K. Leonard	56912US002	2113

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EXAMINER

LAZOR, MICHELLE A

ART UNIT	PAPER NUMBER
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1734

DATE MAILED: 07/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.



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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/087,301
Filing Date: February 27, 2002
Appellant(s): LEONARD, WILLIAM K.

For Appellant

EXAMINER'S ANSWER

MAILED
JUL 13 2004
GROUP 1700

This is in response to the appeal brief filed 5/21/04.

(1) *Real Party in Interest*

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A statement identifying the real party in interest is contained in the brief.

(2) *Related Appeals and Interferences*

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) *Status of Claims*

The statement of the status of the claims contained in the brief is incorrect. Claims 30 – 48 stand rejected, while Claims 49 and 50 are allowed

(4) *Status of Amendments After Final*

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) *Summary of Invention*

The summary of invention contained in the brief is correct.

(6) *Issues*

The appellant's statement of the issues in the brief is correct.

(7) *Grouping of Claims*

Appellant's brief includes a statement that claims 30 – 48 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

(8) *Claims Appealed*

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) *Prior Art of Record*

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2867108	SEVERINI	10-1952
5034250	GUERTIN	7-1991
4059068	GUILLERMIN ET AL.	11-1977
6737113	LEONARD ET AL.	5-2004

(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 30, 32, 33, 35, 42 – 45, and 48 are rejected under 35 U.S.C. 102(b) as being anticipated by Von Kohorn (U.S. Patent No. 2570173).

Regarding Claims 30, 32, 33, Von Kohorn discloses a device comprising a coating station (20) that directly sprays a substantially uneven coating to at least some of the exposed portion of a filamentous article and an improvement station comprising two or more rotating rolls (21) that periodically contact and re-contact the wet coating at different positions along the length of the filamentous article (Figure; column 4, lines 4 – 20); Von Kohorn also discloses the coating station which is capable of periodically applying the coating liquid, and of changing the application period by turning the spray nozzles on and off. Thus Von Kohorn discloses all the limitations of Claims 30, 32, 33, and anticipates the claimed invention.

Regarding Claims 35, 42 – 45 and 48, Von Kohorn discloses the rolls have the same period of contact with the filamentous article, wherein the filamentous article has a direction of motion and the direction of rotation of all the rolls is the same as the direction of motion, wherein there is substantially no slippage between the rolls and the filamentous article; and wherein a voided coating is applied to the filamentous article and converted by contact with the rolls to a void-free coating (Figure; column 4, lines 4 – 23). Thus Von Kohorn discloses all the limitations of Claims 35, 42 – 45 and 48, and anticipates the claimed invention.

3. Claims 30 – 33, 36 – 45, and 48 are rejected under 35 U.S.C. 102(b) as being anticipated by Severini (U.S. Patent No. 2867108).

Regarding Claims 30 – 33, Severini discloses a device comprising a coating station (16) that indirectly sprays by means of a shower nozzle or drips by means of a pipe (column 4, lines 43 – 48) a substantially uneven coating to at least some of the exposed portion of a filamentous article and an improvement station comprising two or more rotating rolls (10) (11) that periodically contact and re-contact the wet coating at different positions along the length of the filamentous article (Figures 1 and 2; column 4, lines 43 – 62 and column 5, lines 16 – 37); Severini also discloses the coating station which is capable of periodically applying the coating liquid, and of changing the application period by turning the spray nozzles on and off. Thus Severini discloses all the limitations of Claims 30 – 33, and anticipate the claimed invention.

Regarding Claims 36 – 45 and 48, Severini discloses the rolls that do not have the same period of contact with the filamentous article, wherein the rolls all have different periods of contact with the filamentous article and wherein the rotational periods of the rolls are not periodically related; wherein the filamentous article has at least 13 contacts with the rolls

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following application of the substantially uneven coating (Figures 1 and 2), wherein the filamentous article has a direction of motion and the direction of rotation of all the rolls is the same as the direction of motion, wherein there is substantially no slippage between the rolls and the filamentous article; and wherein a voided coating is applied to the filamentous article and converted by contact with the rolls to a void-free coating (Figures 1 and 2; column 3, line 66 – column 4, line 11). Thus Severini discloses all the limitations of Claims 36 – 45 and 48, and anticipates the claimed invention.

4. Claims 30 – 34, 36, 38, 39, 42 – 46, and 48 are rejected under 35 U.S.C. 102(b) as being anticipated by Guertin (U.S. Patent No. 5034250).

Regarding Claims 30 – 33, Guertin discloses a device comprising a coating station (21) that directly sprays or drips a substantially uneven coating to at least some of the exposed portion of a filamentous article and an improvement station comprising two or more rotating rolls (10) (11) (18) that periodically contact and re-contact the wet coating at different positions along the length of the filamentous article (Figure; column 2, lines 56 – 66); Guertin also discloses the coating station which is capable of periodically applying the coating liquid, and of changing the application period by turning the spray nozzles on and off. Thus Guertin discloses all the limitations of Claims 30 – 33, and anticipate the claimed invention.

Regarding Claims 34, 36, 38, and 39, Guertin discloses at least three rolls, wherein the rolls do not have the same period of contact with filamentous article; wherein the rotational periods of the rolls are not periodically related; and wherein the filamentous article has at least five contacts with the rolls following application of the substantially uneven coating (Figure).

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Thus Guertin discloses all the limitations of Claims 34, 36, 38, and 39, and anticipate the claimed invention.

Regarding Claims 42 – 46 and 48, Guertin discloses the filamentous article has a direction of motion and the direction of rotation of all the rolls is the same as the direction of motion, wherein there is substantially no slippage between the rolls and the filamentous article; wherein at least one of the rolls is grooved; and wherein a voided coating is applied to the filamentous article and converted by contact with the rolls to a void-free coating (Figure; column 2, line 56 – column 3, line 15). Thus Guertin discloses all the limitations of Claims 42 – 46 and 48, and anticipates the claimed invention.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 31 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Von Kohorn.

Von Korn discloses using a coating station (20). The sprayers of the coating station are considered capable of dripping an uneven coating to at least some of the exposed portion of a filamentous article. In any event, it would have been obvious to use dripping means to conserve coating material and prevent excess coating material from being wasted in the coating area by spraying.

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7. Claim 31 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Guertin.

Guertin discloses using a coating station (21). The sprayers of the coating station are considered capable of dripping an uneven coating to at least some of the exposed portion of a filamentous article. In any event, it would have been obvious to use dripping means to conserve coating material and prevent excess coating material from being wasted in the coating area by spraying.

8. Claim 47 is rejected under 35 U.S.C. 103(a) as being unpatentable over Guertin as applied in Claim 30 above, in view of Guillermin et al. (U.S. Patent No. 4059068).

Guertin discloses all the limitations of Claim 30, but does not specifically disclose all of the rolls to have grooves. However, Guillermin et al. teaches using grooved rolls for treatment of filamentary products (column 1, lines 37 – 43). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use grooves for all the rolls of the treatment apparatus to reduce friction (column 1, line 39) and to place the filamentary product in a desired location.

(11) Response to Argument

Regarding the argument presented by the Applicant directed towards the obviousness-type double patenting rejection, Examiner believes Application No. 09757955 (now US Patent No. 6737113) discloses “a coating station that directly or indirectly applies a substantially uneven coating to at least some of the exposed portion of a filamentous article”. The ‘955 application discloses “improving the uniformity of a liquid on a substrate”, which is considered to indicate if the uniformity of a liquid is being improved, it must initially be an uneven coating.

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Also, although the '955 application does not specifically disclose a filamentous article, a substrate would be considered to include filamentous articles.

Regarding the arguments presented by the Applicant directed towards the anticipation rejection by Von Kohorn, Examiner disagrees. Although Von Kohorn discloses a continuously operating device that completely saturates a yarn with a treatment liquid, the structure claimed by the Applicant is not different. While features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. *In re Schreiber*, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997). Rather, the Applicant's apparatus *operates* differently, rather than being structurally unique. Apparatus claims cover what a device is, not what a device does. *Hewlett-Packard Co. V. Bausch & Lomb Inc.*, 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990). A claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. *Ex part Masham*, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987). One of ordinary skill in the art would know there must be at least an on/off valve to stop the flow of coating between runs. This would provide a means of coating unevenly the filamentous article. Again, although Von Kohorn does not specifically address voids or low spots in the initially applied treatment, the apparatus is capable of functioning as claimed, and therefore anticipates the claimed invention. Additionally, assuming uneven voided coating is dispensed onto the filamentous article by turning the apparatus on and off, the coating would be converted to a void-free coating by

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contact with the rolls disclosed by Von Kohorn as claimed in Claim 48, since the filamentous article is wound around the rolls several times, thereby spreading the coating evenly.

Regarding the arguments presented by the Applicant directed towards the obviousness rejection by Von Kohorn, Examiner disagrees. As stated in the Final Office Action, it would have been obvious to use dripping means to conserve coating material and prevent excess coating material from being wasted in the coating area by spraying. Applicant argues the prior art uses several continuously operating spray nozzles, however as stated above, the structure claimed by the Applicant is not different. While features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. *In re Schreiber*, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997). Rather, the Applicant's apparatus *operates* differently, rather than being structurally unique. Apparatus claims cover what a device is, not what a device does. *Hewlett-Packard Co. V. Bausch & Lomb Inc.*, 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990). A claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. *Ex part Masham*, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987). One of ordinary skill in the art would know there must be at least an on/off valve to stop the flow of coating between runs. This would provide a means of coating unevenly the filamentous article. Also, providing roll contacts after the last drip applicator and before a dryer is not claimed in the apparatus, and is therefore irrelevant. In addition, although the apparatus of Von Kohorn is capable of containing several drip applicators and may be less likely to produce a completely uniform wet coating, the claims

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are limited to improving the uniformity of the coating, and is not specific as to how much the uniformity is improved; therefore Von Kohorn renders the claim unpatentable. Finally, although Von Kohorn uses a catch trough to collect and possibly re-circulate excess treating liquid, the excess liquid may be contaminated and may need to be filtered before being reintroduced to the system and re-sprayed onto the filamentous article. Therefore one in the art would be more apt to use dripping means to conserve coating material rather than or in addition to drip collection means in order to avoid contamination problems.

Regarding *In re Mills*, 16 USPQ2d 1490 (Fed. Cir. 1990) and *In re Gordon*, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984), as Applicant has pointed out, the above cases involve obviousness rejections, not anticipation rejections. In those cases, there needed to be motivation to modify the apparatus. However, in this case, the apparatus disclosed by Von Kohorn does not need to be modified; rather the operation of the apparatus would need to be modified. Therefore the apparatus itself is not unique, and therefore is anticipated.

Finally, regarding the rejection of Claim 33, Von Kohorn is considered to disclose a coating station that periodically applies the coating liquid wherein the application period may be adjusted by turning the spray nozzles on and off as discussed above.

Regarding the arguments presented by the Applicant directed towards the anticipation rejection by Severini, Examiner disagrees. As in Von Kohorn above, Severini discloses a continuously operating device that completely saturates a yarn with a treatment liquid; however, the structure claimed by the Applicant is not different. While features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. *In re Schreiber*, 128 F.3d 1473,

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1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997). Rather, the Applicant's apparatus *operates* differently, rather than being structurally unique. Apparatus claims cover what a device is, not what a device does. *Hewlett-Packard Co. V. Bausch & Lomb Inc.*, 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990). A claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. *Ex part Masham*, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987). One of ordinary skill in the art would know there must be at least an on/off valve to stop the flow of coating between runs. This would provide a means of coating unevenly the filamentous article. Also, since Severini discloses an orifice that is placed in a simple pipe (column 4, lines 43 – 49), one of ordinary skill in the art would know to use one of several sized orifices, depending on the application, and is therefore considered to disclose a pipe that would be capable of dripping. One of ordinary skill in the art would be motivated to use dripping means to conserve coating material and prevent excess coating material from being wasted in the coating area by spraying. Additionally, assuming uneven voided coating is dispensed onto the filamentous article by turning the apparatus on and off, the coating would be converted to a void-free coating by contact with the rolls disclosed by Severini as claimed in Claim 48, since the filamentous article is wound around the rolls several times, thereby spreading the coating evenly.

Finally, regarding the rejection of Claim 33, Severini is considered to disclose a coating station that periodically applies the coating liquid wherein the application period may be adjusted by turning the spray nozzles on and off as discussed above.

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Regarding the arguments presented by the Applicant directed towards the anticipation rejection by Guertin, Examiner disagrees. As in *Von Kohorn and Severini* above, Guertin discloses a continuously operating device that completely saturates a yarn with a treatment liquid; however, the structure claimed by the Applicant is not different. While features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. *In re Schreiber*, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997). Rather, the Applicant's apparatus *operates* differently, rather than being structurally unique. Apparatus claims cover what a device is, not what a device does. *Hewlett-Packard Co. V. Bausch & Lomb Inc.*, 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990). A claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. *Ex part Masham*, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987). One of ordinary skill in the art would know there must be at least an on/off valve to stop the flow of coating between runs. This would provide a means of coating unevenly the filamentous article. Additionally, assuming uneven voided coating is dispensed onto the filamentous article by turning the apparatus on and off, the coating would be converted to a void-free coating by contact with the rolls disclosed by Guertin as claimed in Claim 48, since the filamentous article is wound around the rolls several times, thereby spreading the coating evenly.

Regarding the arguments presented by the Applicant directed towards the obvious type rejection by Guertin, Examiner disagrees. As stated in the Final Office Action, it would have been obvious to use dripping means to conserve coating material and prevent excess coating

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material from being wasted in the coating area by spraying. Applicant argues the prior art uses several continuously operating spray nozzles, however as stated above, the structure claimed by the Applicant is not different. While features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. *In re Schreiber*, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997). Rather, the Applicant's apparatus *operates* differently, rather than being structurally unique. Apparatus claims cover what a device is, not what a device does. *Hewlett-Packard Co. V. Bausch & Lomb Inc.*, 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990). A claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. *Ex part Masham*, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987). One of ordinary skill in the art would know there must be at least an on/off valve to stop the flow of coating between runs. This would provide a means of coating unevenly the filamentous article. Also, providing roll contacts after the last drip applicator and before a dryer is not claimed in the apparatus, and is therefore irrelevant. In addition, although the apparatus of Guertin is capable of containing several drip applicators and may be less likely to produce a completely uniform wet coating, the claims are limited to improving the uniformity of the coating, and is not specific as to how much the uniformity is improved; therefore Guertin renders the claim unpatentable. Finally, Guertin does not disclose recirculation means. In any event, the excess liquid may be contaminated and may need to be filtered before being reintroduced to the system and re-sprayed onto the filamentous article. Therefore one of ordinary skill in the art would be more apt to use dripping means to

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conserve coating material rather than or in addition to drip collection means in order to avoid contamination problems.

Additionally, regarding the rejection of Claim 33, Guertin is considered to disclose a coating station that periodically applies the coating liquid wherein the application period may be adjusted by turning the spray nozzles on and off as discussed above.

Finally, regarding Claims 46 and 48, Guertin discloses at least one of the rolls (18) is grooved (19); and wherein a voided coating is applied to the filamentous article and converted by contact with the rolls to a void-free coating (Figure; column 2, line 56 – column 3, line 15).

Regarding the arguments presented by the Applicant directed towards the obviousness rejection by Guertin in view of Guillermin et al., Examiner disagrees. Guillermin et al. is included to show the teaching using grooved rolls for treatment of filamentary products is known, and would have been obvious to use in order to reduce friction and to place the filamentary product in a desired location. Guillermin et al. was not included to show non-uniform treatment of yarn.

For the above reasons, it is believed that the rejections should be sustained.

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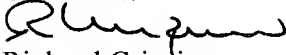
Respectfully submitted,



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July 12, 2004

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